WHAT IS CLAIMED IS:

- 1. A method for preventing necrosis in a pedicle flap or in any microvascular surgery comprising topically applying to pedicle or other source of blood supply, a therapeutically effective amount of vasodilator composition containing NO or NO donor or prodrug that causes formation of nitrosothiol in tissue, optionally in combination with lidocaine.
- 2. The method of Claim 1 where the vasodilator composition contains alkyl nitrite of molecular weight up to 10,000.
 - 3. The method of Claim 2 where the alkyl nitrite is ethyl nitrite.
- 4. The method of Claim 1 where the vasodilator composition contains an S-nitrosothiol.
 - 5. The method of Claim 4 where the S-nitrosothiol is cyclodextrin NO.
- 6. The method of Claim 1 where the vasodilator composition contains a metal nitrosyl.
- 7. A method for delivering a drug comprising incorporating the drug in a gel or in a solution or in a pharmaceutical base, containing from 1 µM to 100 µM nitrosylated polythiolated cyclodextrin or other nitrosylated polymer or long lived gel coating equivalent exemplified by cyclodextrin or coating the drug in pill form with a coating that delivers nitric oxide, and administering the resulting drug containing composition topically to the skin or topically to the gastrointestinal tract.
- 8. The method of Claim 7 where the drug is incorporated in a therapeutically effective amount in a gel containing from 1 μ M to 100 mM nitrosylated polythiolated cyclodextrin.